#### **AMENDMENTS TO THE CLAIMS**

1) (Currently amended) A resin comprising: polyethylene terephthalate or a copolyester of polyethylene terephthalate and a dicarboxylic acid or its ester equivalent or a copolyester of polyethylene terephthalate and a diol, and substituted cyclic anhydride, said substituted cyclic anhydride being not more than 100 microequivalents per gram of said polyester or copolyester, said resin having a CEG content greater than about 25 microequivalents per gram, said substituted cyclic anhydride is selected form the class consisting of:

## a) substituted succinic anhydrides

where R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> can be hydrogen, alkyl, alkenyl or aryl groups, and at least one group is not hydrogen;

#### b) substituted maleic anhydride

where R<sup>1</sup> and R<sup>2</sup> can be hydrogen, alkyl, alkenyl or aryl groups, and at least one group is not hydrogen;

MAR-30-2006 16:30 P.04

## c) substituted glutaric anhydride

where R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup> and R<sup>6</sup> can be hydrogen, alkyl, alkenyl or aryl groups, and at least one group is not hydrogen;

# d) diglycolic anhydride and substituted diglycolic anhydride

where R<sup>1</sup>, R<sup>2</sup>. R<sup>3</sup> and R<sup>4</sup> can be hydrogen, alkyl, alkenyl or aryl groups;

### e) Substituted phthalic anhydride

$$R^2$$
 $R^3$ 
 $R^4$ 

where R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> can be hydrogen, alkyl, alkenyl or aryl groups, and at least one group is not hydrogen;

MAR-30-2006 16:30 P.05

# f) diphenic anhydride and substituted diphenic anhydride

$$\mathbb{R}^{8}$$
 $\mathbb{R}^{7}$ 
 $\mathbb{R}^{5}$ 
 $\mathbb{R}^{4}$ 
 $\mathbb{R}^{3}$ 

where R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> can be hydrogen, alkyl, alkenyl or aryl groups.

- 2) (Deleted)
- 3) (Currently amended) The resin of elaim 2 claim 1, wherein said substituted succinic anhydride is selected from the group of methyl succinic anhydride, 2,2-dimethyl succinic anhydride, phenyl succinic anhydride, octadecenyl succinic anhydride, hexadecenyl succinic anhydride, eicosodecenyl succinic anhydride, 2-methylene succinic anhydride, and mixtures of these.
- 4) (Currently amended) The resin of claim 2 claim 1, wherein said substituted glutaric anhydride is selected from the group of 3-methyl glutaric anhydride, phenyl glutaric anhydride, diglycolic anhydride, 2-ethyl 3-methyl glutaric anhydride, 2,2- dimethyl glutaric anhydride, 3,3-tetramethylene glutaric anhydride, and mixtures of these.
- 5) (Currently amended) The resin of elaim 2 claim 1, wherein said substituted phthalic anhydride is selected from the group of 4-methyl phthalic anhydride, 4-t-

butyl phthalic anhydride, tetrahydrophthalic anhydride, hexahydrophthalic anhydride, and mixtures of these.

- 6) (Currently amended) The resin of elaim 2 claim 1, wherein said substituted maleic anhydride is selected from the group of tetrahydrophthalic anhydride, dimethyl maleic anhydride, 1-cyclopentene-1,2-dicarboxylic anhydride or mixtures of these.
- 7) (Original) The resin of claim 1, wherein said resin has an I.V. of greater than about 0.70.
- 8) (Original) The resin of claim 1, wherein said CEG is less than about 80 microequivalents per gram.
- 9) (Currently amended) A preform made from polyethylene terephthalate or a copolyester of polyethylene terephthalate and a dicarboxylic acid or its ester equivalent or a copolyester of polyethylene terephthalate and a diol, and substituted cyclic anhydride, said substituted cyclic anhydride being not more than 100 microequivalents per gram of said polyester or copolyester, said resin having a CEG content greater than about 25 microequivalents per gram, said substituted cyclic anhydride is selected form the class consisting of:

#### a. substituted succinic anhydrides

MAR-30-2006 16:30 P.07

where R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> can be hydrogen, alkyl, alkenyl or aryl groups, and at least one group is not hydrogen;

### b. substituted maleic anhydride

where R<sup>1</sup> and R<sup>2</sup> can be hydrogen, alkyl, alkenyl or aryl groups, and at least one group is not hydrogen;

## c. substituted glutaric anhydride

where R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup> and R<sup>6</sup> can be hydrogen, alkyl, alkenyl or aryl groups, and at least one group is not hydrogen;

## d. diglycolic anhydride and substituted diglycolic anhydride

# where R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> can be hydrogen, alkyl, alkenyl or aryl groups;

## e. Substituted phthalic anhydride

$$\mathbb{R}^2$$
 $\mathbb{R}^3$ 
 $\mathbb{R}^4$ 

where R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> can be hydrogen, alkyl, alkenyl or aryl groups, and at least one group is not hydrogen;

## f. diphenic anhydride and substituted diphenic anhydride

$$R^8$$
 $R^7$ 
 $R^5$ 
 $R^4$ 
 $R^3$ 

where R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> can be hydrogen, alkyl, alkenyl or aryl groups.

10) (Deleted)

11) (Currently amended) A bottle made from polyethylene terephthalate or a copolyester of polyethylene terephthalate and a dicarboxylic acid or its ester equivalent or a copolyester of polyethylene terephthalate and a diol, and substituted cyclic anhydride, said substituted cyclic anhydride being not more than 100 millimoles per kilogram of said polyester or copolyester, said resin having a CEG content greater than about 25 millimoles per kilogram, said substituted cyclic anhydride is selected form the class consisting of:

#### a. substituted succinic anhydrides

where R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> can be hydrogen, alkyl, alkenyl or aryl groups, and at least one group is not hydrogen;

#### b. substituted maleic anhydride

where R<sup>1</sup> and R<sup>2</sup> can be hydrogen, alkyl, alkenyl or aryl groups, and at least one group is not hydrogen;

## c. substituted glutaric anhydride

where R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup> and R<sup>6</sup> can be hydrogen, alkyl, alkenyl or aryl groups, and at least one group is not hydrogen;

## d. diglycolic anhydride and substituted diglycolic anhydride

where R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> can be hydrogen, alkyl, alkenyl or aryl groups:

### e. Substituted phthalic anhydride

where R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> can be hydrogen, alkyl, alkenyl or aryl groups, and at least one group is not hydrogen;

#### f. diphenic anhydride and substituted diphenic anhydride

$$R^8$$
 $R^7$ 
 $R^6$ 
 $R^5$ 
 $R^4$ 
 $R^3$ 

where R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> can be hydrogen, alkyl, alkenyl or aryl groups.

12) (Currently amended) A method of making a resin, used to make a container having reduced caustic stress cracking, comprising: forming polyester or copolyester by esterification followed by polycondensation to make a polyethylene terephthalate or polyethylene terephthalate copolyester; adding at the end of said polycondensation not more than 100 millimoles per kilogram based on said polyester or copolyester of a substituted cyclic anhydride, said resin having a CEG content greater than about 25 millimoles per kilogram, wherein said resin has a I.V. of greater than about 0.70, said substituted cyclic anhydride is selected form the class consisting of:

#### a. substituted succinic anhydrides

MAR-30-2006 16:31 P.12

where R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> can be hydrogen, alkyl, alkenyl or aryl groups, and at least one group is not hydrogen;

### b. substituted maleic anhydride

where R<sup>1</sup> and R<sup>2</sup> can be hydrogen, alkyl, alkenyl or aryl groups, and at least one group is not hydrogen;

### c. substituted glutaric anhydride

where R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup> and R<sup>6</sup> can be hydrogen, alkyl, alkenyl or aryl groups, and at least one group is not hydrogen;

MAR-30-2006 16:31 P.13

# d. diglycolic anhydride and substituted diglycolic anhydride

where R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> can be hydrogen, alkyl, alkenyl or aryl groups;

## e. Substituted phthalic anhydride

where R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> can be hydrogen, alkyl, alkenyl or aryl groups, and at least one group is not hydrogen;

## f. diphenic anhydride and substituted diphenic anhydride

$$R^8$$
 $R^7$ 
 $R^6$ 
 $R^6$ 
 $R^6$ 
 $R^7$ 
 $R^6$ 

# where R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> can be hydrogen, alkyl, alkenyl or aryl groups.

#### 13) (Deleted)

- 14) (Original) The method of claim 12, wherein said substituted succinic anhydride is selected from the group of methyl succinic anhydride, 2,2-dimethyl succinic anhydride, phenyl succinic anhydride, octadecenyl succinic anhydride, hexadecenyl succinic anhydride, eicosodecenyl succinic anhydride, 2-methylene succinic anhydride, and mixtures of these.
- 15) (Original)The method of claim 12, wherein said substituted substituted glutaric anhydride is selected from the group of 3-methyl glutaric anhydride, phenyl glutaric anhydride, diglycolic anhydride, 2-ethyl 3-methyl glutaric anhydride, 2,2-dimethyl glutaric anhydride, 3,3-tetramethylene glutaric anhydride, and mixtures of these.
- 16) (Original)The method of claim 12, wherein said substituted phthalic anhydride is selected from the group of 4-methyl phthalic anhydride, 4-t-butyl phthalic anhydride, tetrahydrophthalic anhydride, hexahydrophthalic anhydride, and mixtures of these.
- 17) (Original)The method of claim 12, wherein said substituted maleic anhydride is selected from the group of tetrahydrophthalic anhydride, dimethyl maleic anhydride, 1-cyclopentene-1,2-dicarboxylic anhydride or mixtures of these.
- 18) (Original)The method of claim 12, wherein said substituted anhydride has a melt point of less than about 100° C.

P.14

MAR-30-2006 16:32 P.15

> 19) (original) The method of claim 12, wherein said substituted anhydride has a melt point at about 25° C.

20) (original)A container having reduced caustic stress cracking made from the resin produced according to claim 12.